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IN THE CLAIMS

Please consider the claims as follows:

1. (Currently Amended) An apparatus for forming a multiplexed transport stream to deliver an interactive program guide (IPG), the apparatus comprising:

an encoder and packetizer adapted (i) to receive a plurality of video inputs, an audio input, and a plurality of data inputs, and (ii) to encode and packetize the inputs to generate a plurality of video packet streams, an audio packet stream, and a plurality of data packet streams; and

a multiplexer and assigner adapted (i) to receive the plurality of video packet streams, the audio packet stream, and the plurality of data packet streams, (ii) to assign program identifiers (PIDs) to said packet streams, and (iii) to multiplex said packet streams to form the transport stream; and

a program mapping table for storing (i) PID assignment of video, audio, and data PIDs associated with a timeslot having a viewership level greater than a predetermined threshold, (ii) PID assignment of video and audio programming associated with a predetermined time period, and (iii) PID assignment of data PIDs associated with said video and audio programming associated with said predetermined time period.

2. (Currently Amended) A method for forming a multiplexed transport stream to deliver an interactive program guide The apparatus of claim 1, wherein said timeslot is associated with prime time viewing.

3. (New) The apparatus of claim 1, wherein said prime time viewing is associated with one of local, regional, and national viewership.

4. (New) The apparatus of claim 1, wherein said predetermined time period comprises future viewership time schedules.

5. (New) The apparatus of claim 4, wherein video and audio PIDs associated with said future viewership time schedules are mapped with data PIDs associated with said future viewership time schedules.

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6. (New) The apparatus of claim 5, wherein a plurality of video PIDs are respectively mapped to each data PID.

7. (New) The apparatus of claim 5, wherein said mapping is based on periodicities a timeslot in a day, a particular IPG page, and a particular day associated with said future viewership time schedules.

8. (New) The apparatus of claim 7, wherein popularly viewed video PIDs are distributed evenly among data PIDs to provide load balancing.

9. (New) The apparatus of claim 8, further comprising:
means for identifying a largest prime number that is less than or equal to a number of data PIDs associated with said future viewership time schedules; and
means for assigning a data PID to each video PID by performing a Modulo calculation of $x \text{ Mod } y = z$, where x equals a video PID value, y equals said largest prime number, and z equals a remainder, and said remainder is assigned to said data PID.

10. (New) A method for forming a multiplexed transport stream to deliver an interactive program guide (IPG), the apparatus comprising:

encoding and packetizing a plurality of video inputs, an audio input, and a plurality of data inputs to generate a plurality of video packet streams, an audio packet stream, and a plurality of data packet streams;

assigning program identifiers (PIDs) to said plurality of video packet streams, the audio packet stream, and the plurality of data packet streams;

mapping (i) PID assignment of video, audio, and data PIDs associated with a timeslot having a viewership level greater than a predetermined threshold, (ii) PID assignment of video and audio programming associated with a predetermined time period, and (iii) PID assignment of data PIDs associated with said predetermined time period; and

multiplexing said packet streams to form the transport stream

11. (New) The method of claim 10, wherein said timeslot is associated with prime time viewing.

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12. (New) The method of claim 10, wherein said prime time viewing is associated with one of local, regional, and national viewership.

13. (New) The method of claim 10, wherein said predetermined time period comprises future viewership time schedules.

14. (New) The method of claim 13, further comprising mapping said video and audio PIDs associated with said future viewership time schedules to data PIDs associated with said future viewership time schedules.

15. (New) The method of claim 14, further comprising mapping a plurality of video PIDs respectively to each data PID.

16. (New) The method of claim 14, wherein said mapping is based on periodicities a timeslot in a day, a particular IPG page, and a particular day associated with said future viewership time schedules.

17. (New) The method of claim 16, wherein popularly viewed video PIDs are distributed evenly among data PIDs to provide load balancing.

18. (New) The method of claim 17, further comprising:
identifying a largest prime number that is less than or equal to a number of data PIDs associated with said future viewership time schedules; and
assigning a data PID to each video PID by performing a Modulo calculation of $x \text{ Mod } y = z$, where x equals a video PID value, y equals said largest prime number, and z equals a remainder, and said remainder is assigned to said data PID.